IP Link® Device Interface Communication Sheet

This document provides additional assistance with wiring your Extron IP Link enabled product to your device. Different components may require a different wiring scheme than those listed below.

For complete operating instructions, refer to the user's manual for the specific Extron IP Link enabled product or the controlled device manufacturer supplied documentation.

Device Specifications:

Device Type: Receiver
Manufacturer: Yamaha
Firmware Version: N/A
Model(s): RX-A810, RX-A810BL, RX-A1010, RX-A2010, RX-A3010, RX-A820, RX-A830

Version History:

Driver Version	Date	IP Link Compiler	GC Version	Notes
4	05/10/2013	1.6.0	1.16	Added model RX-A820 and RX-A830.
3	9/19/2012	1.5.1	3.3.2	Added models.RX-A1010, RX-A2010, RX-A3010
2	2/15/2012	1.5.1	3.3.1	Added Scaled Volume. Incremented Volume Step size to 5 for MLC 60 Control.
1	1/12/2012	1.5.1	3.3.1	Initial version.

Driver Notes:

Driver has Optimization for:

- Levels

Control Commands & States:

AM	Up	Down	
Bass	-6.0 to 6.0 in steps of .5		
Decoder	DTS	Auto	
FM	Up	Down	
Input	SIRIUS	USB/IPOD	Tuner
	HDMI 1	HDMI 2	HDMI3
	HDMI4	HDMI5	HDMI 6
	HDMI 7	AV1	AV2
	AV3	AV4	AV5
	AV6	V-AUX	Audio 1
	Audio 2	DOCK	IPOD
	BLUETOOTH	UAW	Net
	RHAPSODY	SIRIUS InternetRadio	Pandora
	Napster	PC	NET RADIO
	USB		
Main Zone Transport	Play	Pause	Stop
	Skip -	Skip +	
Main Zone Volume (Discrete)	-80 to 16.5 in steps of 0.5		
Main Zone Volume (Step)	Up	Down	
Mute	On	Off	
Power Control	On	Off	
Pure Direct	On	Off	
Scaled Volume	0 to 96 in steps of 1		
Scene	1 – 4		
Straight	On	Off	

Continued

Surround	Action Game	Hall in Munich	Hall in Vienna
	Chamber	Cellar Club	The Roxy Theatre
	The Bottom Line	SPORTS	Surround Decode
	Roleplaying Game	Music Video	Standard
	SPECTACLE	SCI-FI	ADVENTURE
	Drama	MONO MOVIE	2 CH STEREO
	7 Ch Stereo		
Treble	-6.0 to 6.0 in steps of .5		
Tuner Band	AM	FM	
Tuner Preset	1 – 40		
Zone 2 Audio Mute	On	Off	
Zone 2 Input	USB/IPOD	SIRIUS	Tuner
	AV5	AV6	V-AUX
	Audio 1	Audio 2	DOCK
	IPOD	BLUETOOTH	UAW
	USB/NET	Net	RHAPSODY
	SIRIUS InternetRadio	Pandora	Napster
	PC	NET RADIO	USB
Zone 2 Power	On	Off	
Zone 2 Transport	Play	Pause	Stop
	Skip -	Skip +	
Zone 2 Volume (Discrete)	-80 to 16.5 in steps of 0.5		
Zone 2 Volume (Step)	Up	Down	

Status Available:

Bass	-6.0 to 6.0 in steps of .5		
Connection Status	Connected	Disconnected	
Decoder	DTS	Auto	
Input	NET RADIO	SIRIUS	Tuner
	HDMI 1	HDMI 2	HDMI3
	HDMI4	HDMI5	HDMI 6
	HDMI 7	AV1	AV2
	AV3	AV4	AV5
	AV6	V-AUX	Audio 1
	Audio 2	DOCK	IPOD
	BLUETOOTH	UAW	USB/IPOD
	RHAPSODY	SIRIUS InternetRadio	Pandora
	Napster	PC	
Main Zone Volume (Discrete)	-80 to 16.5 in steps of 0.5		
Mute	On	Off	
Power Control	On	Off	
Pure Direct	On	Off	
Scaled Volume	0 to 96 in steps of 1		
Straight	On	Off	
Surround	Surround Decode	Hall in Munich	Hall in Vienna
	Chamber	Cellar Club	The Roxy Theatre
	The Bottom Line	SPORTS	Action Game
	Roleplaying Game	Music Video	Standard
	SPECTACLE	SCI-FI	ADVENTURE
	Drama	MONO MOVIE	2 CH STEREO
	7 Ch Stereo		
Treble	-6.0 to 6.0 in steps of .5		

Continued

Tuner Band	AM	FM	
Tuner Preset	1 – 40		
Zone 2 Audio Mute	On	Off	
Zone 2 Input	NET RADIO	SIRIUS	Tuner
	AV5	AV6	V-AUX
	Audio 1	Audio 2	DOCK
	IPOD	BLUETOOTH	UAW
	USB/NET	USB/IPOD	RHAPSODY
	SIRIUS InternetRadio	Pandora	Napster
	PC		
Zone 2 Power	On	Off	
Zone 2 Volume (Discrete)	-80 to 16.5 in steps of 0.5		

MLC60 Series Supported Commands:

AM	Up	Down	
Decoder	DTS	Auto	
FM	Up	Down	
Input	USB/IPOD	SIRIUS	Tuner
	HDMI 1	HDMI 2	HDMI3
	HDMI4	HDMI5	HDMI 6
	HDMI 7	AV1	AV2
	AV3	AV4	AV5
	AV6	V-AUX	Audio 1
	Audio 2	DOCK	IPOD
	BLUETOOTH	UAW	Net
	RHAPSODY	SIRIUS InternetRadio	Pandora
	Napster	PC	NET RADIO
	USB		
Main Zone Transport	Play	Pause	Stop
	Skip -	Skip +	
Main Zone Volume (Step)	Up	Down	
Mute	On	Off	
Power Control	On	Off	
Pure Direct	On	Off	
Scene	1 – 4		
Straight	On	Off	

Continued

Surround	ADVENTURE	Hall in Munich	Hall in Vienna
	Chamber	Cellar Club	The Roxy Theatre
	The Bottom Line	SPORTS	Action Game
	Roleplaying Game	Music Video	Standard
	SPECTACLE	SCI-FI	Surround Decode
	Drama	MONO MOVIE	2 CH STEREO
	7 Ch Stereo		
Tuner Band	AM	FM	
Tuner Preset	1 – 40		
Zone 2 Audio Mute	On	Off	
Zone 2 Input	USB/IPOD	SIRIUS	Tuner
	AV5	AV6	V-AUX
	Audio 1	Audio 2	DOCK
	IPOD	BLUETOOTH	UAW
	USB/NET	Net	RHAPSODY
	SIRIUS InternetRadio	Pandora	Napster
	PC	NET RADIO	USB
Zone 2 Power	On	Off	
Zone 2 Transport	Play	Pause	Stop
	Skip -	Skip +	
Zone 2 Volume (Step)	Up	Down	

Cable and Adapter Requirements:

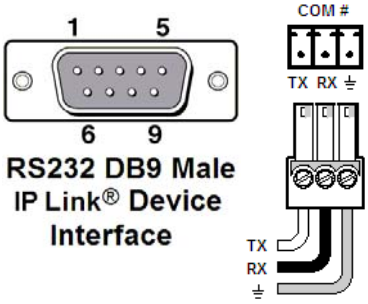
M/F Null modem serial cable.

Notes for the Device:

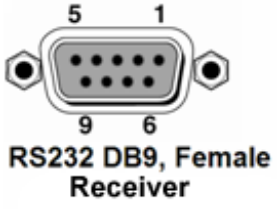
Serial communication:

Port Type:	RS-232	**Parity:**	None
Baud Rate:	9600	**Stop Bits:**	1
Data Bits:	8	**Flow Control:**	None

Pin Assignments Diagram:



Signal	Pin	Main Cable	Pin	Signal
RxD	2		2	RxD
TxD	3		3	TxD
GND	5		5	GND



Note: Captive screw connector may also be used as a serial connection.

General Notes: